## AMENDMENTS TO THE DRAWINGS:

Please find accompanying this response replacement sheets for Figs. 1(a), 2, 3, 4 and 15. In Fig 1(a) amendments are made to indicate Bt and St. In Figs. 2-4 amendments are made to reference numbers more consistent with those used in the specification. In Fig. 15, amendments are made to remove reference numbers 40 and 41 which are not discussed in the specification.

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## **REMARKS**

Claims 4-7 and 9-11 remain pending in this application. Claims 1-3 were previously cancelled. New claims 12, 13 and 14 are added herein. Claims 4-7 and 9-10 are amended herein. Claim 4 is amended to incorporate the structural limitations of claim 8 and clarify claim language. Claim 8 has been cancelled.

The drawings are objected to for not including reference signs Bt and St.

Applicant has amended Fig. 1(a) to include reference signs Bt and St.

The drawings are objected to for including reference numbers 40 and 41, which are not identified in the specification.

Applicant has amended Fig. 15 by removing reference numbers 40 and 41.

Although no objection was asserted applicant has also amended Figs. 2-4 to apply reference numbers more consistent with those used in the specification.

The specification is objected to by the Examiner for including terms which are not clear, concise or exact.

Applicant submits herewith a substitute specification wherein amendments are effected to address issues of clarity, conciseness and exactitude and address grammatical issues. Also accompanying this amendment is a reproduction of the previous version of the specification with markings indicating the amendments effected in the substitute specification in accordance with MPEP §608.01(q) and 37 CFR 1.125(b). No new matter is added. Entry of the substitute specification is respectfully requested.

Claim 4 is objected to for misspelling the word "part" and for not introducing "extension" structural elements with the word "an".

Applicant has amended claim 4 herein to address the objections in accordance with the guidance provided in the Office Action.

Claims 4-11 are rejected under 35 U.S.C. §112, second paragraph, for issues of indefiniteness.

Applicant has amended the claims to address issues of indefiniteness.

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Claims 4-11 are rejected under 35 U.S.C. §103(a) as obvious over Baumgartner in light of the knowledge of one of ordinary skill in the art. The rejection asserts, without citing any references, that it would have been obvious to modify ratios of cross-sectional area and moment of inertia of the tubular rim part to the solid rim part in the manner recited in the claims. In essence, the rejection is based upon factual assertions proffered as "common knowledge" without evidentiary support for the factual assertions.

"If applicant challenges a factual assertion as not properly officially noticed or not properly based upon common knowledge, the examiner must support the finding with adequate evidence." MPEP §2144.03. Furthermore, it is not "appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art." *Id. citing In re Ahlert*, 424 F.2d 1088, 1091 (CCPA 1970).

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Applicant respectfully traverses the rejection for failing proffer sufficient evidence to support factual assertions upon which the finding of obviousness is based. More specifically, Applicant asserts that it is erroneous to characterize as "common knowledge" shaping and wall thicknesses of the tubular rim part being set so that:

- (a) a ratio of cross-sectional area of the tubular rim part to that of the solid rim part is no more than 100%;
- (b) a geometrical moment of inertia of the tubular rim part about an axis that is parallel to an axis of the light alloy wheel and runs through a centroid of a cross section of the tubular rim part is no less than a geometrical moment of inertia of the solid rim part about an axis that is parallel to the axis of the light alloy wheel and runs through a centroid of a cross section of the solid rim part; and
- (c) a geometrical moment of inertia of the tubular rim part about an axis that is perpendicular to the axis of the light alloy wheel and runs through the centroid of the cross section of the tubular rim part is no less than a geometrical moment of inertia of the solid rim part about an axis that is perpendicular to the axis of the light alloy wheel axis and runs through the centroid of the cross section of the solid rim part.

Baumgartner specifically discusses issues such as "rigidity", "bending strength" and "impact behavior" of wheels. See Baumgartner col. 1 lines 52-55. Despite this fact, moment of inertia ratios and particularly those of a tubular rim part to a solid rim part are never discussed. Even the Office Action itself states that "Baumgartner fails to expressly disclose" these structural limitations. Office Action, page 6, paragraph bridging pages 6 and 7. Thus, it is evident that it is not common knowledge that moment of inertia ratios effect "rigidity", "bending strength" and "impact behavior" of wheels and, more specifically, that the recited moment inertia ratio limitations would result in improved characteristics of the wheel.

Similarly, Baumgartner discusses specific structural limitations to reduce weight. Baumgartner col. 3 lines 5-10. In particular, Baumgartner discusses spokes (22) on the wheel rim (10) being hollow to reduce weight. Thus, since Baumgartner is concerned with reducing the weight of the wheel, limitations regarding the ratio of cross-sectional area should have been specified, if such structural limitation was common knowledge to one of ordinary skill in the art. Therefore, it is evident that it is not common knowledge that the ratio of cross-sectional area decreases the weight of the wheel, particularly with the cross-sectional area limitation as recited in the claims.

It should be noted that additional structural limitations have been added to claim 4 regarding wall thickness dimensions. These additional structural limitations are supported by the discussion on page 18, first paragraph of the original specification. In addition, the structural limitations recited in new claim 12 are supported by the discussion on page 1, last paragraph bridging pages 1 and 2, through page 2, first full paragraph, of the original specification. New claim 13 is the previously presented claim 10 as depending from claim 6 and was added to address issues of formality regarding the structural recitation in claim 10. The structural limitations recited in new claim 14 are supported by the exemplary embodiments of the invention shown in Figs. 4, 7 and 10.

Applicant respectfully requests a one month extension of time for responding to the Office Action. The fee of \$130 for the extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.

If there is any discrepancy between the fee(s) due and the fee payment authorized in the Credit Card Payment Form PTO-2038 or the Form PTO-2038 is missing or fee payment via the Form PTO-2038 cannot be processed, the USPTO is

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hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted, JORDAN AND HAMBURG LLP

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Enc: Form PTO-2038; Replacement and Annotated drawing sheets of Figs. 1(a), 2, 3, 4 and 15; Substitute Specification; and Marked reproduction of current specification.